The Mediating Effects Of Life Goals On The Relationship Between Trust And Multicultural Awareness; Differences Of Middle School And High School

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ARTICLE INFO	ABSTRACT
	This research aimed to examine whether there are differences in interpersonal trust, impersonal trust, selfish and altruistic life goals, and multicultural awareness between middle school and high school students. Additionally, the study sought to verify whether the influence of interpersonal trust and impersonal trust on multicultural awareness, mediated by selfish and altruistic life goals, differs between middle school and high school students. The research findings are as follows: First, multicultural awareness did not differ between middle school and high school students. However, interpersonal trust, impersonal trust, selfish life goals, and altruistic life goals were higher in middle school students compared to high school students. Second, both middle school and high school students exhibited higher levels of multicultural awareness when they had higher levels of interpersonal trust. In contrast, impersonal trust had no significant impact on multicultural awareness in either group. However, the mediating effects of selfish and altruistic life goals differed between middle school and high school students. For middle school students, selfish life goals had no mediating effects, while altruistic life goals mediated interpersonal trust and multicultural awareness statically. For high school students, selfish life goals were found to mediate interpersonal and impersonal trust with multicultural awareness. Altruistic life goals also statically mediated interpersonal trust and impersonal trust with multicultural awareness. These findings indicate that the relationships between trust, life goals, and multicultural awareness differ between middle school and high school students, highlighting the need for tailored interventions and educational approaches for each group. **Keywords:** interpersonal trust, impersonal trust, selfish life goals, altruistic life goals, multicultural awareness, mediating effect

1. Introduction

According to the Immigration and Foreigners Policy Statistics Monthly Report released in December 2022, the number of foreign residents in South Korea reached 1.96 million in 2021, and it is expected to continue increasing in the future (Ministry of Justice, 2022). In addition, the number of multicultural students in elementary and middle schools has steadily increased since 2012 based on the '2023 Education Basic Statistics Survey'. In 2022, there were approximately 168,000 multicultural students, accounting for 3.2% of the total student population (Ministry of Education, 2022). In a society where people with diverse cultural backgrounds coexist, multicultural awareness becomes crucial. It signifies an attitude of accepting and respecting others as equal members of society without prejudice and making efforts to understand and implement policies that support their integration and coexistence as members of the community (Choi & Kong, 2022).

In particular, fostering multicultural awareness among adolescents is not only essential for preparing the future of young people individually but also critical for the development of Korean society as a whole (Hwang, 2021). Adolescents during this period tend to form flexible and open-minded thinking related to multicultural awareness, but they can also develop exclusivity and prejudice (Jeon, 2020). Subsequently, the Ministry of

Education has identified 'Cultural Diversity and Coexistence' as one of the six major indicators of democratic citizenship required of young people (Lee, 2022). They have committed to promote multicultural awareness through school education. In relation to this the identification of factors that influence multicultural awareness is as important as fostering multicultural awareness through the curriculum. Revealing the factors that influence multicultural awareness denotes that through management and control of these factors, multicultural awareness can be nurtured and developed.

For these reasons, research on factors influencing multicultural awareness is conducted in South Korea. Previous studies mostly considered multicultural awareness is determined by individual factors in students. However, one of the factors that recently received the most attention is trust. The belief in the importance of trust in promoting harmony and cohesion in multicultural societies is increasing. In fact, most existing studies focused on interpersonal trust. These studies generally showed that interpersonal trust has a positive impact on favorable attitudes towards immigrants (Choi & Kong, 2022; Herreros & Criado, 2009). However, other studies suggested that interpersonal trust is not a determining factor for multicultural acceptance or multicultural awareness (Lee, 2017). These inconsistent research results highlight the need for repeated studies to confirm how interpersonal trust influences multicultural awareness.

At present, it is difficult to find research on the impact of impersonal trust on multicultural awareness. In addition, the current adolescents attending middle and high schools belong to the prominent Generation Z. Generation Z refers to those born from 1997 to 2010, and they are exposed to digital environments since childhood. They are skilled at multitasking, and excel in collecting and utilizing various information through the internet, smartphones, AI tools, and other digital platforms (Shatto & Erwin, 2016). Based on these characteristics, it is highly likely that the multicultural awareness of Generation Z adolescents is influenced by their trust in various media outlets they closely associate with and the information provided to them. Hence, it is necessary to explore not only the impact of interpersonal trust but also impersonal trust on multicultural awareness among Generation Z adolescents.

Furthermore, there is a lack of research on how trust influences multicultural awareness through specific mediators. Although previous studies did not directly examine the relationship between trust, life goals, and multicultural awareness, some research findings suggest that trust in teachers affects students' life goals, that media and the information provided impact relationship orientation, and that studies reporting higher levels of intrinsic and relational life goal orientation also show higher levels of multicultural acceptance (Jeon, 2020). These findings indicate that selfish and altruistic life goals may mediate the relationship between trust and multicultural awareness.

Therefore, this study aims to investigate whether there are differences in interpersonal trust and impersonal trust, selfish and altruistic life goals, and multicultural awareness between middle school and high school students. It also seeks to verify whether interpersonal trust and impersonal trust have differential effects on multicultural awareness through selfish and altruistic life goals between middle school and high school students. Through this research, the goal is to provide concrete strategies for enhancing multicultural awareness among adolescents. The research questions are as follows. First, is there a differences between middle school students and high school students in interpersonal trust, impersonal trust, selfish life goals, altruistic life goals, and multicultural awareness? Second, is there a difference between middle school students and high school students in the impact of interpersonal trust and impersonal trust on multicultural awareness through selfish life goals and altruistic life goals as mediating variables?

2. Theoretical Background

2.1 Concepts and Characteristics of Trust, Life Goals, and Multicultural Awareness

One of the forms of social capital is trust. Trust refers to the expectation that others will act in a way that is beneficial or, at the very least, not harmful to oneself. It is a fundamental requirement for group living and public activities (Choi & Kong, 2022). In this study, trust in the information provided by important figures for adolescents, such as parents, friends, and teachers, is defined as interpersonal trust. Trust in information provided through the internet, smartphones, AI tools, and similar mediums is labeled as impersonal trust. While past research primarily focused on interpersonal trust as a crucial factor in shaping individual attitudes and perceptions, there is a growing need to consider the importance of trust in impersonal media. Considering that 61.6% of adolescents classified as Generation Z access news through the internet, and a majority of them engage with information through platforms like YouTube and the Internet of Things (IoT), it becomes evident that research on trust in impersonal media is equally important for understanding the formation of personal attitudes and consciousness (Jang & Kim, 2020). There are arguments that adolescents trust the information provided by the internet more than traditional media (Jang, Kim 2020), but at the same time, Generation Z still places trust in information obtained from acquaintances (Oh & Moon, 2020).

The second concept to discuss is life goals. Also known as future goals, these refer to what individuals consider important in their lives and the values they aim to achieve throughout their lifetime (Davis, Lin, Borning, Friedman, Kahn & Waddell, 2006). Life goals serve as guiding principles that permeate an individual's entire life and can influence how they evaluate social phenomena and determine their attitudes towards others. Individuals living in the same era tend to adopt common adaptation patterns, personal experiences, upbringing, and educational activities; yet they develop different goal orientations (Beak, Park &

Heo, 2023).
In this study, the term 'selfish life goals' is used to signify valuing personal success, such as academic achievements or honor. Conversely, the term 'altruistic life goals' is used to signify valuing harmonious relationships with neighbors, practicing love, and benevolence based on a sense of altruism and religious values. There is, however, limited research on the life goal orientations of Generation Z adolescents. A study by Oh & Moon (2020), reported that these adolescents relatively prioritized health, family, same-sex friends, money, work, and leisure, while they considered neighbors and religion to be relatively less important. It is noteworthy that Korean culture has traditionally placed significant importance on relational aspects such as consideration for others and harmony. This cultural context might lead to expectations that altruistic life goals are more prevalent among Generation Z adolescents than selfish life goals (Lee, Kim & Bae, 2016).
The concept and characteristics of multicultural awareness is intriguing. Multicultural awareness refers to the degree to which individuals understand cultural differences, refrain from harboring biases towards people from different cultural backgrounds, respect them, and make efforts to recognize and implement policies that acknowledge the rights needed of immigrants for them to coexist within the community (Choi & Kong, 2022; Lee, 2020). While many previous studies have focused on multicultural acceptance, showing favorable attitudes toward individuals from different cultural backgrounds and accepting them as fellow citizens, this study aims to address the broader concept of multicultural awareness. Multicultural awareness can vary with age, and in general, Generation Z is likely to have higher levels of multicultural awareness because they tend to place value on diversity over emotional stability or high satisfaction (Oh & Moon, 2020). Some prior research argued that younger individuals or lower-grade students exhibit higher levels of multicultural awareness, while others reported that middle school students have lower levels of multicultural acceptance compared to high school students (Choi & Kong, 2022; Kim, 2008). Some studies also found difficulty into detecting the effects of age on multicultural awareness (Lee & Kim, 2013).

2.2   Impact Relationships among Trust, Life Goals, and Multicultural Awareness
The impact of interpersonal and impersonal trust on multicultural awareness is significant, as demonstrated by prior studies. Empirical evidence consistently showed that trust enhances multicultural awareness. Studies by Herreros & Criado (2009) and Choi, Mi-kyung, Kong & Gye-soon (2022) indicated that higher levels of social trust are associated with increased support for multicultural societies and greater cultural openness (Choi & Kong, 2022; Herreros & Criado, 2009). Notably, the formation of close relationships with significant individuals in one's immediate surroundings, such as friends and teachers, is linked to higher levels of multicultural awareness. Research also suggested that active interaction with parents is associated with greater multicultural acceptance, intimate relationships with friends have a positive impact on multicultural acceptance, and the teacher-student relationship significantly influences multicultural acceptance (Lee & Kim,2013; Hur, 2021; Kim & Hwang, 2012).However, it is important to note that research on the impact of trust in media sources such as the press, internet, and AI on multicultural awareness is relatively scarce.
Relatedly, the relationship between interpersonal trust and life goals is discussed in some prior studies. Individuals who prioritize personal interests tend to have lower levels of interpersonal trust, and negative correlation between an individual's achievement orientation and trust is reported (Kim & Kwon, 2017). On the other hand, there is a positive association between an individual's religious orientation and trust among group members. While these studies did not directly address trust in parents, research indicated that intimate relationships with parents can influence a child's pursuit of intrinsic life goals, resulting in higher levels of life orientation goals (Lee, 2022). Since intimate relationships with parents positively impact trust in parents, it can be deduced that trust in parents may enhance the inclination toward altruistic life goals. Some studies suggest that trust in teachers can significantly impact a student's life goals (Huh & Choi, 2009). However, research specifically exploring the relationship between impersonal trust and life goals is limited.
Moreover, the impact of life goals on multicultural awareness is a crucial aspect to consider. As mentioned earlier, life goals serve as guiding principles that determine one's attitude toward others, making it likely that different life goal pursuits among adolescents could lead to varying attitudes toward individuals from diverse cultural backgrounds. Numerous studies reported that individuals who pursue external and selfish life goals such as fame, wealth, or image tend to harbor strong biases against people from different cultural backgrounds and exhibit lower levels of multicultural awareness (Seo, 2015). Conversely, those who pursue life goals focused on interpersonal relationships, societal contributions, and benevolence demonstrate more tolerant and open-minded attitudes (Lee & Kim, 2013; Seo, 2015). Choi(2017) argues that Koreans have historically embraced various religions and developed a unique set of values known as "inclusive tolerance" due to their historical and geopolitical characteristics. He suggests that the virtues of Korean inclusive tolerance are likely to have a positive influence on multicultural awareness. This implies that individuals who pursue external and selfish life goals are likely to exhibit lower levels of multicultural awareness, while those who pursue life goals that emphasize social contributions and altruism are likely to have higher levels of multicultural awareness.

3.   Research Methodology

3.1   Research Model
This research examines how interpersonal and impersonal trust influence multicultural awareness through

the mediation of selfish and altruistic life goals. The research model is depicted in Figure 1, and was utilized to validate these relationships.
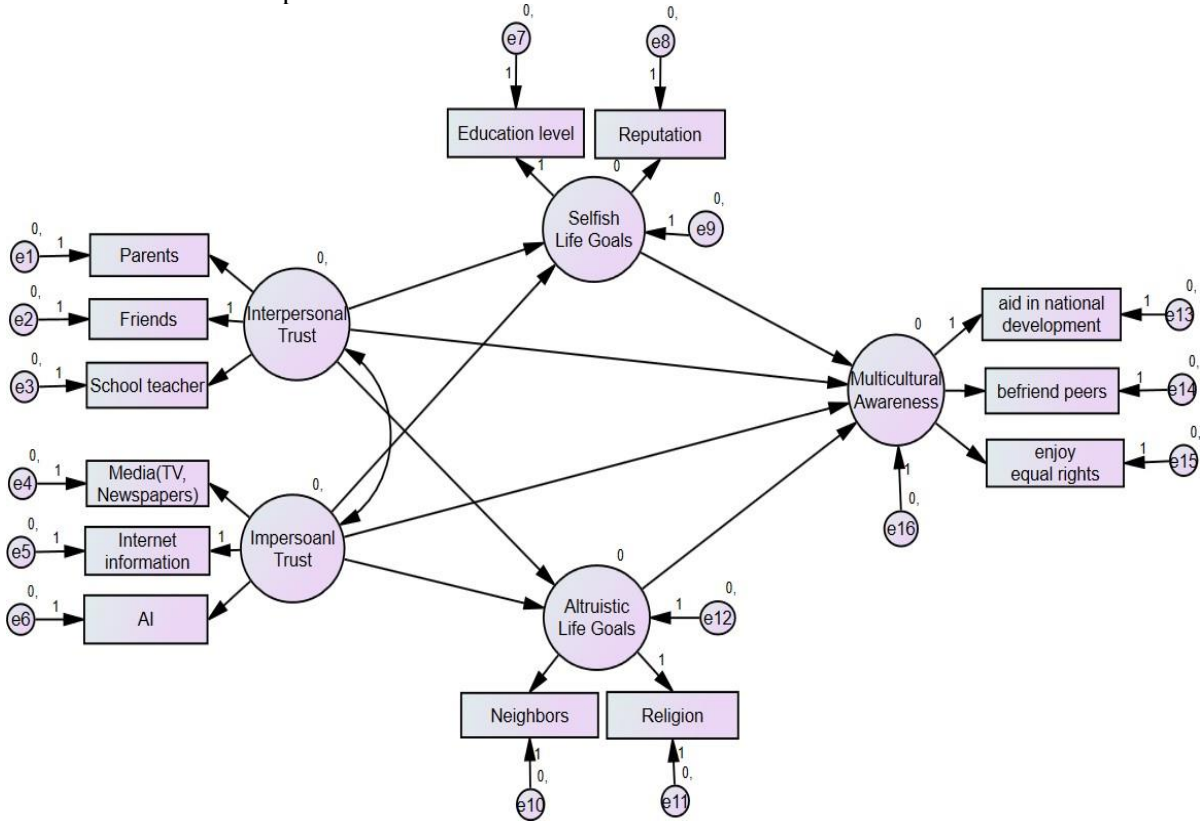

Figure 1. Research Model

3.2 Research Subjects

This research utilized data from the 'Study on the Changing Values of Generation Z' conducted by the Korea Youth Policy Institute in 2020. The study targeted students from the 1st grade of middle school to the 3rd grade of high school nationwide. These students were born between 2001 and 2006, making them part of the representative Generation Z. The characteristics of the research participants by school grade are presented in Table 1.

Table 1. Characteristics of Research Subjects

Category		Middle school N(%)	High school N(%)	Total N(%)
Gender	Male	1,219(22.7)	1,449(27.0)	2,668(49.7)
	Female	1,278(23.8)	1,427(26.6)	2,705(50.3)
Total		2,497(46.5)	2,876(53.5)	5,373(100.0)
Loacl scale	Metropolitan area	976(18.2)	1,166(21.7)	2,14239.9
	Medium-sized city	1,298(24.2)	1,203(22.4)	2,501(46.5)
	Rural area	223(4.2)	507(9.4)	730(13.6)
Total		2,497(46.5)	2,876(53.5)	5,373(100.0)

3.3 Measuring Instrument

The study used data from the 'Values Change Study of Generation Z Teenagers'. It utilized trustworthiness, importance of life, and multiculturalism from the survey. The question, 'How much do you trust the following sources?' asked respondents to rate their trust in parents, friends, school teachers, media (TV, newspapers), internet information, and artificial intelligence on a 4-point Likert scale (① Not trustworthy at all - ④ Very trustworthy). The factor analysis results and reliability of the trust measurement items are shown in Table 2.

Table 2. Validity and Reliability of Trust Measureent Instrument

Contents	Factor 1	Factor 2	Variable name	Reliability
How much do you trust the following subjects? (Parents)	.694			
How much do you trust the following subjects? (Friends)	.758		Interpersonal Trust	.594
How much do you trust the following subjects? (School teachers)	.748			
How much do you trust the following subjects? (Media (TV, Newspapers))		.728		
How much do you trust the following subjects? (Internet information)		.812	Impersonal Trust	.629
How much do you trust the following subjects? (AI)		.706		
Measure of Sampling Adequacy(MSA) test of Kaiser-Meyer-Olkin(KMO): 0.689 Bartlett's test of sphericity: 4255.761(df=15, p=.000) Cumulative variance ratio of the two factors: 56.633				

The question 'How important are the following in your life?' was rated on a 4-point Likert scale (① Not important at all - ④ Very important) to assess the importance of education, honor, neighbors, and religion. The factor analysis results and reliability of the items measuring life goals are shown in Table 3.

Table 3. The Validity and Reliability of Life Goals Measureent Instrument

Contents	Factor 1	Variable name	Reliability
How important is the following in your life? (Education level)	.856	Selfish Life Goals	.624
How important is the following in your life? (Reputation)	.842		
How important are the following matters in your life? (Neighbors)	.811	Altruistic Life Goals	.450
How important are the following matters in your life? (Religion)	.792		
Measure of Sampling Adequacy(MSA) test of Kaiser-Meyer-Olkin(KMO): 0.547 Bartlett's test of sphericity: 1954.837(df=6, p=.000) Cumulative variance ratio of the two factors: 68.799			

The request 'Please mark the number that best matches your thoughts' is used for responding to three multicultural-related items on a 4-point Likert scale (① Not at all - ④ Very much so). The factor analysis results and reliability of the multiculturalism measurement items are shown in Table 4.

Table 4. Validity and Reliability of the Multicultural Awareness Measurement Instrument

Contents	Factor 1	Variable name	Reliability
The transformation of South Korea into a multicultural society can contribute to the development of the nation.	.740		
I can make friends with peers from different races or ethnicities.	.855	Multicultural Awareness	.743
Multicultural youth should live as equal members of Korean society and enjoy the same rights.	.848		

3.4 Analysis Method

To examine the characteristics of the middle and high school students, frequencies and percentages were calculated. And in assessing the validity of the three measurement instruments, factor analysis was conducted using principal component analysis and Varimax rotation, while Cronbach's α was calculated to assess reliability. Additionally, to validate the normality of variables, correlations between variables, means, standard deviations, skewness, and kurtosis were examined.

The latent mean differences between middle and high school students were analyzed. But, it was first verified whether the models for middle school and high school students met the assumptions of configural invariance, measurement invariance, intercept invariance, and factor variance invariance. The latent means of middle school students were fixed at 0, and the latent means (β) of high school students were estimated. Effect size (Cohen's d) was used to evaluate the magnitude of differences. If d is less than 0.2, it is considered a small difference; if d is greater than 0.2 but less than 0.5, it is considered a moderate difference; if d is greater than

0.8, it is considered a large difference.

Then, multigroup analysis was conducted to determine if there were differences in path coefficients between middle and high school students. Prior to the multigroup analysis, configural invariance and structural (path) invariance were tested. Subsequently, it was examined whether the differences in path coefficients between groups were statistically significant. Model fit was evaluated using CFI (Comparative Fit Index), TLI (Tucker-Lewis Index), and RMSEA (Root Mean Square Error of Approximation). Models with CFI and TLI values above 0.90 were considered to have excellent fit, while models with an RMSEA below 0.05 were considered to have good fit. Descriptive statistics such as frequencies, percentages, means, standard deviations, skewness, and kurtosis were analyzed using SPSS 24.0, while latent mean differences and group-specific path coefficients were examined using AMOS 24.0.

4. Research Rusults

4.1 Descriptive Statistics of Variables by School Level

The descriptive statistics for the key variables by school grade level are as shown in Table 5. All major variables exhibit skewness values less than 2.0 of absolute value and kurtosis values less than 4.0 of absolute value, indicating that they satisfy the assumption of a normal distribution. This implies the feasibility of conducting a structural equation modeling (SEM) analysis. Upon examining the means of the variables, it can be observed that both middle school and high school students had higher levels of interpersonal trust compared to impersonal trust. Additionally, selfish life goals were higher in magnitude than altruistic life goals. Furthermore, the multicultural attitudes score was relatively high, with an average score of 3.317 on a 4-point scale.

Table 5. Descriptive Statistics of Variables

Category	Middle school			High school			Total		
	M(SD)	Skewness	Kurtosis	M(SD)	Skewness	Kurtosis	M(SD)	Skewness	Kurtosis
Interpersonal Trust	3.314 (0.438)	-0.796	1.627	3.285 (0.463)	-0.727	1.030	3.299 (0.451)	-0.761	1.287
Impersonal Trust	2.448 (0.564)	-0.353	0.115	2.394 (0.551)	-0.226	0.219	2.419 (0.557)	-0.283	0.154
Selfish Life Goals	3.124 (0.600)	-0.377	0.173	3.032 (0.649)	-0.407	0.240	3.075 (0.628)	-0.409	0.247
Altruistic Life Goals	2.269 (0.676)	0.278	-0.380	2.161 (0.710)	0.533	-0.120	2.211 (0.696)	0.409	-0.268
Multicultural Awareness	3.330 (0.478)	-0.435	0.551	3.305 (0.502)	-0.578	1.113	3.317 (0.491)	-0.520	0.895

The results of the correlation analysis of key variables by school grade level are presented in Table 6. It shows that all correlation coefficients (r) between variables are below 0.60, indicating that there is no issue with multicollinearity. For middle school students, there were significant correlations between all variables. However, for high school students, there was no significant correlation between selfish life goals and multicultural awareness, while all other variables showed significant correlations.

Table 6. Correlation of Variables by School Level

Category		Interpersonal Trust	Impersonal Trust	Selfish Life Goals	Altruistic Life Goals	Multicultural Awareness
Middle school	Interpersonal Trust	1				
	Impersonal Trust	.300***	1			
	Selfish Life Goals	.095***	.095***	1		
	Altruistic Life Goals	.244***	.139***	.200***	1	
	Multicultural Awareness	.153***	.124***	.059**	.128***	1
Category		Interpersonal Trust	Impersonal Trust	Selfish Life Goals	Altruistic Life Goals	Multicultural Awareness
High school	Interpersonal Trust	1				
	Impersonal Trust	.272***	1			
	Selfish Life Goals	.112***	.088***	1		
	Altruistic Life Goals	.206***	.183***	.168***	1	
	Multicultural Awareness	.158***	.059**	-0.005	.061***	1

Category		Interpersonal Trust	Impersonal Trust	Selfish Life Goals	Altruistic Life Goals	Multicultural Awareness
Total	Interpersonal Trust	1				
	Impersonal Trust	.286***	1			
	Selfish Life Goals	.107***	.094***	1		
	Altruistic Life Goals	.224***	.166***	.186***	1	
	Multicultural Awareness	.156***	.090***	.024	.092***	1

*p<0.05, **p<0.01 ***p<0.001

4.2   Latent Mean Analysis by School Level

To conduct latent mean analysis by school level, we verified the configural invariance, measurement invariance, intercept invariance, and factor variance invariance for the structural equation model. As shown in Table 7, all invariance criteria were met.

Table 7. Verification of Identity among Groups for Latent Mean Analysis by School Level

Model	χ^2	df	p	TLI	CFI	RMSEA
Model 1: Configural invariance	575.133	110	.000	.941	.959	.028
Model 2: Measurement invariance	591.379	118	.000	.944	.958	.027
Model 3: Intercept invariance	781.506	131	.000	.931	.942	.030
Model 4: Factor variance invariance	805.069	136	.000	.932	.941	.030

Since invariance was confirmed, a latent mean analysis was conducted. Using middle school students as the reference group with a mean of 0, the latent means for high school students were estimated (χ^2=723.913, df=126, p=.000, TLI=.934, CFI=.947, RMSEA=.030). The results as shown in Table 8, indicate no significant difference in multicultural awareness between middle and high school students. However, interpersonal trust, impersonal trust, selfish life goals, and altruistic life goals were significantly higher among middle school students compared to high school students. The effect sizes (Cohen's *d*) revealed that impersonal trust showed a small difference, while interpersonal trust and selfish life goals showed moderate differences, and altruistic life goals showed a large difference.

Table 8. Latent Mean Analysis by School Level

Category	Middle school	High school	Latent difference	Common meanstandard deviation	Effect size.
InterpersonalTrust	.000	-.035**	.035	.124	.282
ImpersonalTrust	.000	-.053**	.053	.253	.209
Selfish Life Goals	.000	-.065***	.065	.168	.387
Altruistic Life Goals	.000	-.084***	.084	.131	.641
Multicultural Awareness	.000	-.013	.013	.125	.104

*p<0.05, **p<0.01, ***p<0.001

4.3   Multi-group Analysis by School Level

To examine whether the mediating effects of selfish life goals and altruistic life goals in the relationship between interpersonal trust and impersonal trust and multicultural awareness differ by school grade, a multi-group analysis was conducted. Based on the results of group equivalence tests presented in Table 9, the initial model showed good fit, and not only the factor coefficient equivalence but also the structural (path) equivalence model improved, so the structural (path) equivalence model was chosen as the final model.

Table 9. Verification of Identity between Groups for Multi-group Analysis by School Level

| Model	χ^2	df	p	TLI	CFI	RMSEA
Basic Model	658.990	112	.000	.932	.951	.030
Factor LoadingInvariance Model	674.479	120	.000	.936	.951	.029
Structural (Path)Invariance Model	695.749	128	.000	.939	.950	.029

The structural equation model fit well and measurement invariance was confirmed, so group-specific path coefficients were analyzed, and the results are presented in Table 10. In the all of middle school students and high school students, interpersonal trust had a direct positive impact on multicultural awareness, while impersonaltrust did not have any significant impact on multicultural awareness.

Table 10. Path Coefficient of Structural Model by School Level

| Category			Middle school				High school				Path
			B	β	S.E.	C.R.	B	β	S.E.	C.R.	
Interpersonal Trust	$\rightarrow$	Selfish Life Goals	.192	.154	.052	3.691^{***}	.171	.136	.044	3.889^{***}	b1
	$\rightarrow$	Altruistic Life Goals	.387	.423	.052	7.439^{***}	.308	.336	.041	7.469^{***}	b3
	$\rightarrow$	Multicultural Awarene	.139	.137	.043	3.253^{***}	.189	.193	.033	5.795^{***}	b2
Impersonal Trust	$\rightarrow$	Selfish Life Goals	.064	.077	.033	1.963^{*}	.076	.082	.031	2.420^{*}	b4
	$\rightarrow$	Altruistic Life Goals	.031	.051	.022	1.418	.103	.152	.022	4.587^{***}	b6
	$\rightarrow$	Multicultural Awarene	.018	.027	.024	.760	-.042	-.058	.022	-1.908	b5
Selfish Life Goals	$\rightarrow$	Multicultural Awarene	.019	.023	.024	.791	-.043	-.055	.021	-2.083^{*}	b7
Altruistic Life Goals	$\rightarrow$	Multicultural Awarene	.144	.129	.037	3.841^{***}	.064	.059	.029	2.165^{*}	b8

*p<0.05, **p<0.01, ***p<0.001

Based on the discussion so far, the final models for each school level have been established as shown in Figure 2 and Figure 3.
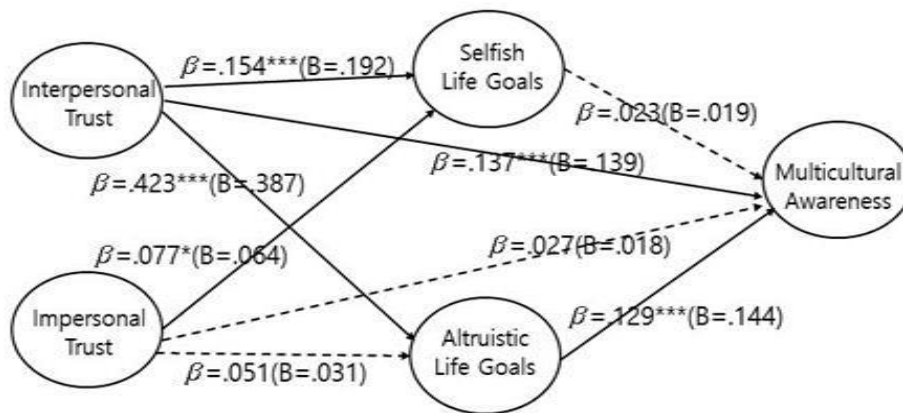
*p<0.05, **p<0.01, ***p<0.001
Figure 2. Final Model of Middle School Students
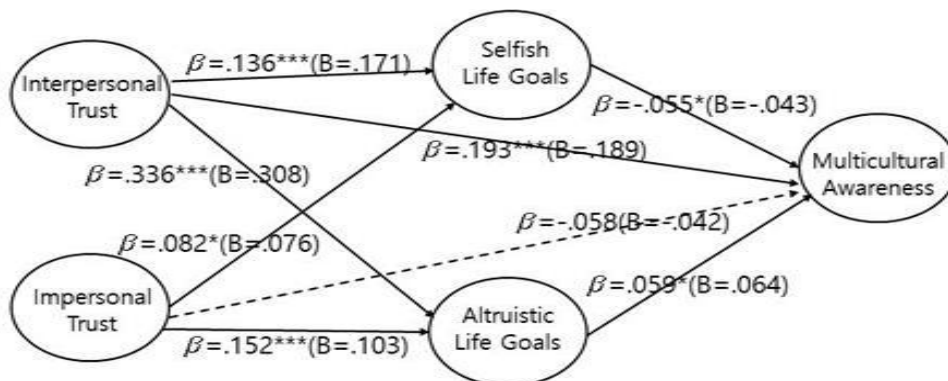
p<0.05, **p<0.01, ***p<0.001
Figure 3. Final Model of High School Students

Table 11 shows direct and indirect effects, and total effects of interpersonal trust, impersonal trust, selfish life goals, altruistic life goals on multicultural awareness of middle school students and high school students. Table 12 shows the Sobel test results for assessing the significance of the mediation effect. If |Z| > 1.96, it is considered statistically significant at a level of 0.05.

In the case of middle school students, selfish life goals did not mediate the relationship between interpersonal trust and multicultural awareness, but altruistic life goals mediated this relationship. Additionally, neither selfish life goals nor altruistic life goals mediated the relationship between impersonal trust and multicultural awareness. For high school students, selfish life goals were found to partially mediate the relationship between interpersonal trust and multicultural awareness, and altruistic life goals were found to fully mediate the relationship between interpersonal trust and multicultural awareness. Additionally, neither selfish life goals nor altruistic life goals mediated the relationship between impersonal trust and multicultural awareness.

Table 11. Direct and Indirect, Total Effects of Variables'

Path			Middle school students			High school students		
			Total effects	Direct effects	Indirect effects	Total effects	Direct effects	Indirect effects
			β(B)	β(B)	β(B)	β(B)	β(B)	β(B)
Interpersonal Trust	→	Selfish Life Goals	.154 (.192)	.154 (.192)		.136 (.171)	.136 (.171)	
	→	Altruistic Life Goals	.423 (.387)	.423 (.387)		.336 (.308)	.336 (.308)	
	→	Multicultural Awarene	.195 (.198)	.137 (.139)	.058 (.059)	.205 (.201)	.193 (.189)	.013 (.012)
Impersonal Trust	→	Selfish Life Goals	.077 (.064)	.077 (.064)		.082 (.076)	.082 (.076)	
	→	Altruistic Life Goals	.051 (.031)	.051 (.031)		.152 (.103)	.152 (.103)	
	→	Multicultural Awarene	.035 (.024)	.027 (.019)	.008 (.006)	-.054 (-.039)	-.058 (-.042)	.005 (.003)
Selfish Life Goals	→	Multicultural Awarene	.023 (.019)	.023 (.144)		-.055 (-.043)	-.055 (-.043)	
Altruistic Life Goals	→	Multicultural Awarene	.129 (.144)	.129 (.019)		.059 (.064)	.059 (.064)	

Table 12. Significance of Mediating Effects

Path					Middle school students		High school students	
					Z	One-tailed probability	Z	One-tailed probability
Interpersonal Trust	→	Selfish Life Goals	→	Multicultural Awarene	0.91	0.18	-2.00	0.02
Interpersonal Trust	→	Altruistic Life Goals	→	Multicultural Awarene	3.20	0.00	1.97	0.02
Impersonal Trust	→	Selfish Life Goals	→	Multicultural Awarene	0.89	0.19	-1.86	0.03
Impersonal Trust	→	Altruistic Life Goals	→	Multicultural Awarene	1.93	0.03	1.95	0.03

5. Discussion and Conclusion

This study aimed to examine whether there are differences in interpersonal trust and impersonal trust selfish life goals and altruistic life goals, and multicultural awareness between middle school and high school students. It also investigated whether the influence of interpersonal trust and impersonal trust mediating selfish life goals and altruistic life goals on multicultural awareness differs between middle school and high school students. The results of the study were as follows.

There was no difference in multicultural awareness between middle school and high school students. However, middle school students had higher levels of interpersonal trust, impersonal trust, selfish and altruistic life goals compared to high school students. Specifically, both middle and high school students had higher levels of interpersonal trust compared to impersonal trust. And middle school students had higher levels of both interpersonal trust and impersonal trust compared to high school students. These results contrast with the idea that adolescents trust online information more and align with the notion that Generation Z relies on information obtained from acquaintances (Jang & Kim, 2020; Oh & Moon, 2020). The fact that middle school students had higher levels of interpersonal turst and impersonal trust than high school students is an additional finding.

Moreover, both middle school and high school students had higher levels of selfish life goals compared to

altruistic life goals. But, middle school students had significantly higher levels of altruistic life goals than high school students. These findings are similar to a study that reported that Generation Z adolescents prioritize health, family, same-sex friends, leisure, work, and money as relatively more important, while neighborly relationships and religion are considered relatively less important (Oh & Moon, 2020). On the other hand, this contradicts with the expectation that Korean culture places a higher emphasis on relational values, such as consideration for others and harmony, as compared to selfish life goals (Lee & Kim, 2016). The results reveal that middle school students had higher levels of both selfish and altruistic life goals than high school students.

Furthermore, the multicultural awareness score of 3.317 out of 4 indicated a high level with no significant differences between middle school and high school students. These results contrast with studies that suggest younger individuals or lower-grade students have higher levels of multicultural awareness (Choi & Kong, 2022), or that middle school students have lower multicultural acceptance compared to high school students (Kim, 2008). Instead, these findings align with research proposing that Generation Z places more value on diversity over emotional stability or high satisfaction, which could explain the high level of multicultural awareness (Oh & Moon, 2020), and the difficulty to detect the effects of age in the research findings (Lee & Kim, 2013).

Secondly, both middle school and high school students showed that higher interpersonal trust was associated with higher multicultural awareness, while impersonal trust had no significant impact on multicultural awareness. These findings are consistent with previous research indicating that meaningful interpersonal trust is positively associated with multicultural awareness (Lee & Kim, 2013; Hur, 2021; Kim & Hwang, 2012). Additionally, the fact that impersonal trust had no influence on multicultural awareness is an important revelation of this study. Fortunately, it is evident from this research that both middle school and high school students had higher interpersonal trust compared to impersonal trust. However, since high school students exhibited lower interpersonal trust compared to middle school students, efforts to improve interpersonal trust of high school students may be necessary.

However, the mediating effects of selfish and altruistic life goals differed between middle school and high school students. In the case of middle school students, selfish life goals had no mediating effects, while altruistic life goals were found to mediate interpersonal trust and multicultural awareness. For high school students, selfish life goals partially mediated interpersonal trust with multicultural awareness, and altruistic life goals mediated interpersonal trust with multicultural awareness. The finding that altruistic life goals mediated interpersonal trust and multicultural awareness for both middle school and high school students are consistent with previous research (Lee, 2022; Kim & Kwon, 2017). These studies have shown that higher trust in parents and teachers is associated with higher intrinsic life goals and a prosocial and altruistic life orientation, which in turn leads to more open attitudes toward individuals from different cultural backgrounds. On the other hand, the result that selfish life goals had no mediating effects for middle school students but negatively influenced multicultural awareness for high school students is in line with research suggesting that pursuing extrinsic and selfish life goals, such as fame, wealth, and image, is associated with lower multicultural awareness and acceptance (Jeon, 2020; Seo, 2015).

However, this highlights the importance of considering the distinct developmental stages of middle school and high school students when interpreting these results.

In conclusion, to enhance multicultural awareness among middle school students, it is necessary to focus on improving altruistic life goals. Additionally, to increase multicultural awareness among high school students, a strategy that simultaneously decreases selfish life goals while raising altruistic life goals should be implemented. The challenge lies in the fact that as revealed in this study, both middle and high school students have lower levels of altruistic life goals compared to selfish life goals. Therefore, efforts to enhance altruistic life goals for both middle school and high school students are required. Particularly, since the altruistic life goals of high school students are at a much lower level than those of middle school students, efforts to improve altruistic life goals among high school students are of utmost importance.

Based on the research findings, I would like to suggest strategies to enhance multicultural awareness among middle school and high school students separately.

Firstly, it is essential to make efforts to enhance interpersonal trust among middle school students. Based on assertions such as increased sense of similarity with parents through affection, generosity, and dedication; importance of adolescents' self-esteem and self-efficacy as determining factors in receiving peer trust; and need for teachers to earn students' trust through effective content delivery, creating a conducive classroom environment for learning, and demonstrating professionalism while considering students' perspectives and fostering intimacy (Lee, Park & Kim, 2006), there is a need to develop targeted educational programs tailored to specific groups. And to reinforce the static influence of interpersonal trust on multicultural awareness, it is crucial to enhance middle school students' altruistic life goals. Methods to help students develop altruistic life goals include enabling students to experience awareness of their inner selves and extending this awareness to peers, neighbors, and the world, based on previous research findings (Kim & Son, 2020; Hur, 2022a). Creating spaces for dialogue within interpersonal relationships where students can engage in honest and sincere conversations with friends is also essential. Providing self-transcendence education for students is necessary as well.

Secondly, since high school students' interpersonal trust, which influences multicultural awareness, is lower

than impersonal trust and even lower than interpersonal trust of middle school students, it is imperative to focus on improving interpersonal trust. Considering that the level of interpersonal trust is lower than that of middle school students, efforts should be concentrated on enhancing interpersonal trust. To mitigate the negative impact of impersonal trust, a parallel strategy should be implemented by reducing selfish life goals while simultaneously increasing altruistic life goals.

The concern lies in the fact that altruistic life goals of high school students are not only lower than selfish life goals but are also significantly lower than middle school students. To address this issue, it is necessary to provide high school students with similar educational programs as middle school students. These programs should focus on improving interpersonal trust and nurturing altruistic life goals while simultaneously offering programs to reduce selfish life goal orientation. In reality, high school students are often preoccupied with academic performance, achievements, and social success as they prepare for college entrance exams. This situation is closely related to the broader context of Korean society, which places a significant emphasis on successful societal integration and achievement (Hur, 2022b). In relation to this, it is essential to provide career education for high school students that encourages them to reflect on the true meaning of their lives, including university entrance and career success. They should also explore the significance of coexisting and contributing to the well-being of others.

Lastly, since this study focused only on middle and high school students within Generation Z, future research should aim to explore the factors influencing multicultural awareness across the entire Generation Z, including upper-grade elementary school students and college students. Additionally, while this study examined personal factors such as interpersonal trust, impersonal trust, selfish life goals, and altruistic life goals as factors influencing multicultural awareness, future research could consider educational factors in the analysis or explore the effectiveness of educational programs in this context.

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